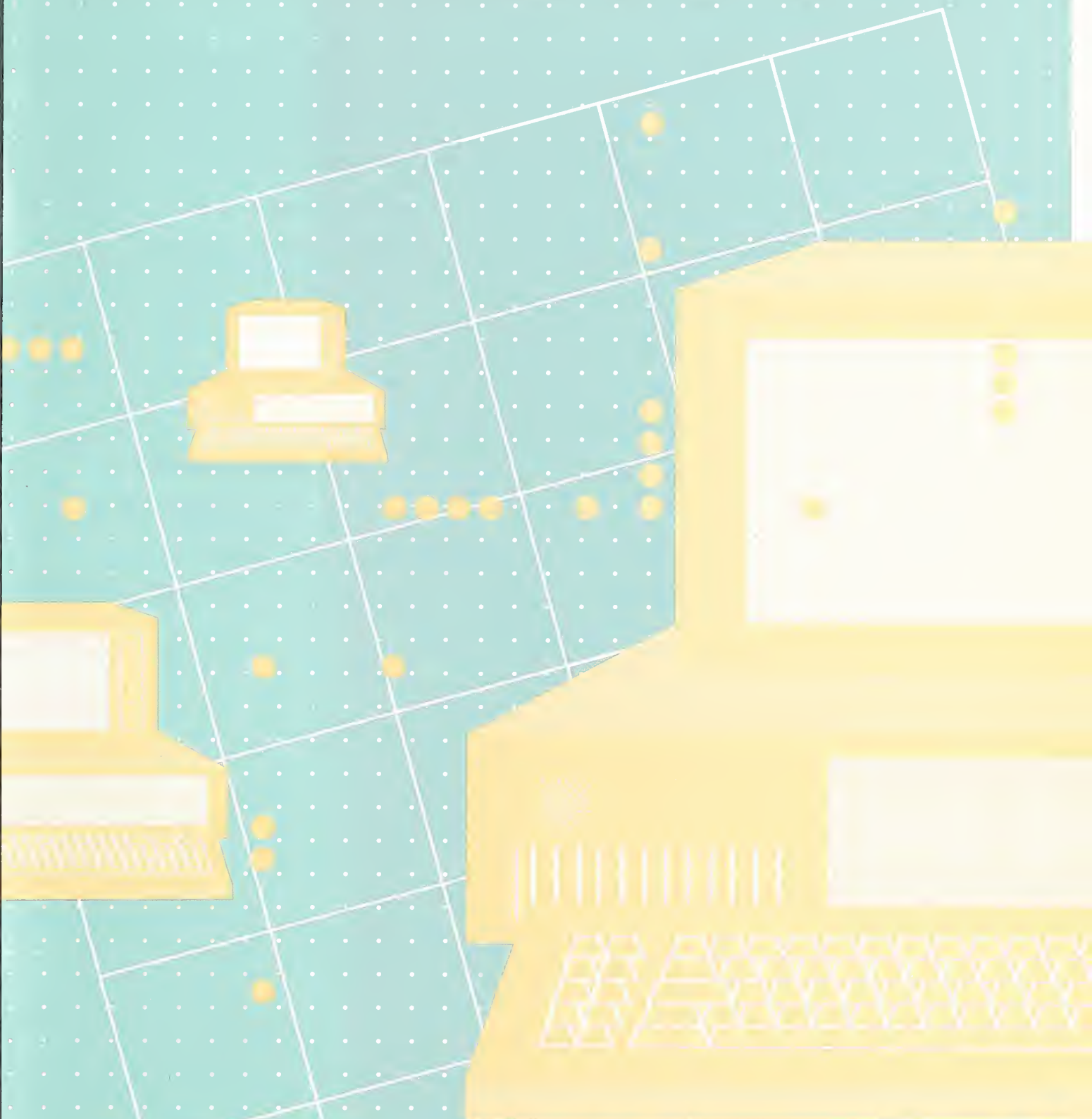


Computing Resources

of the Division of Computer Research and Technology



DCRT Organization

The Division of Computer Research and Technology was established in 1964 to help incorporate the power of modern computers throughout the biomedical programs and administrative procedures of NIH.

As a scientific and technical resource, DCRT: consults in mathematics, statistics, engineering, computer science and technology; collaborates with NIH scientists on research and development projects; designs, develops, and installs small computer systems for specialized laboratory and clinical applications throughout NIH; and carries out independent research and development projects.

To provide the services in support of NIH activities, DCRT: operates a computer center; provides users with computer manuals, training courses, and seminars; performs systems analysis, design, and programming; coordinates automatic data processing policy and reporting for NIH; maintains a library of books, reports, and journals on topics related to its work; and conducts a public information program.

This work occurs in the office of the DCRT director, in two branches, and in four laboratories.

Office of the Director

In addition to its overall administrative functions, the Office of the Director engages in research and provides resources for computing.

Dr. Arnold Pratt
Director, DCRT
12A/3033
496-5703

Advanced Graphics Facility

modeling and display of molecular and higher levels of cellular structure

Mr. Richard Feldmann
12A/2008
496-1100

Personal Workstation Office

assistance, training, and technical information for personal computer workstations and local area network technology.

Mr. David C. Songco
Chief
12A/3039
496-2282

DCRT Library

maintains a collection of publications--over 6,000 books and reports and over 200 current periodical subscriptions-- dealing with computer science, mathematics and statistics, linguistics, along with computer applications in biomedical sciences, engineering, information science, and management; performs search services on computerized bibliographic data bases; primarily for the use of DCRT and other NIH employees, the Library is open to the general public for reference use only, or through interlibrary loan

Ms. Ellen Chu
12A/3018
496-1658

Public Information Office

provides information about DCRT computers and their uses to the NIH community and the general public concerning the Division's program and its role at NIH; prepares and distributes Division brochures; provides audiovisual presentations concerning the Division; coordinates special programs

Ms. Patricia Miller
12A/3027
496-6203

Project Control Office

registers individuals to become users of DCRT services; establishes and maintains accounts; processes requests for other Federal (non-NIH) use of DCRT services; and provides billing information

Ms. Mary Allen
12A/3009
496-6146

NIH ADP Policy Office

coordinates and advises on Federal policy and procedures for NIH ADP resources management

Dr. William Mohler
12A/3033
496-1168

Office of Administrative Management

administrative, financial, and personnel management support, program planning and analysis for DCRT programs

Ms. Marian Dawson
12A/3023
496-5206

Computer Center Branch

The Computer Center Branch (CCB) provides computer services and facilities, charging on a fee-for-service basis under the the NIH Service and Supply Fund. CCB designs, implements, and operates the NIH Central Computer Utility, composed of the IBM System 370 and the DECsystem-10. They are linked to each other and to the remote user by communication facilities and software. Networks provide access from remote locations and transfer of mail and files between computers in the local area, across the country, and throughout the world. CCB provides users with computer assistance, technical publications, and training.

User Services & Assistance Section

provides technical assistance, consulting, operating systems support, training, and technical information for the NIH user community

programmer assistance & liaison for IBM System 370 (PAL Unit)

responsible for new evolving technologies for IBM System 370

support for IBM System 370 operating systems (OSS Unit)

training courses

technical information

System Research & Development Section

develops, installs, and maintains operating systems software for IBM System 370 and DECsystem-10

general systems (IBM)

subsystem development (IBM)

data base systems (IBM)

laboratory systems (DEC)

Operations Section

operates computer and ancillary equipment at the central site

IBM System 370 systems services

Mr. Joseph Naughton
Chief
12/2244
496-5381

Mrs. Fran Halverson
12A/1033
496-5524

Mr. Pete Morton
12A/1033
496-5524

Mr. Rudy Sack
12A/1026
496-5524

Mr. Ed Suiter
12A/1033
496-2949

Ms. Patricia Logan
12A/1025
496-2339
TDD 496-8294

Mrs. Martha Wise
12A/1017
496-5431

Mr. Robert Brunelle
12/2244
496-1708

Mr. Elliott Alterman
12/2241
496-5181

Mr. William Jones
12/2241
496-5181

Mr. Jack Halverson
12B/2N207
496-6665

Dr. John Dickson
12B/2N207
496-4823

Mr. Robert Mamayek
12A/1007
496-5815

Mr. Elgin Etchison
12A/1007
496-5815

	output distribution services	Mrs. Irene Davis 12A/1007 496-5815
	DECsystem-10 operations	Mr. James Jacobs DEC-10 Computer Room 496-6755
	output handling	Mr. Mark Davis 12A/1000 496-6183
	information media library	Ms. Anita D. Jordan 12/1100 496-6021
Program Support Section	provides program maintenance services for special large production systems	Mr. William Clark 12B/2N207 496-6244
	administrative systems support	Mr. Clinton Stoops 12B/2N207 496-6244
	scientific systems support	Mr. Edward Rubick 12B/2N207 496-6244
Dedicated Equipment Services	assists users to acquire equipment for use with the NIH Central Computer Utility: terminals, modems, remote job entry workstations	Mr. Carl Cramer 12A/1039 496-2248

Data Management Branch

The Data Management Branch (DMB) is a central NIH resource for systems design, analysis, and programming. DMB operates under the NIH Service and Supply Fund and charges on a fee-for-service basis. DMB develops application programs and relatively simple-to-use general purpose, user-oriented computer tools for data management and information processing. The Branch is also responsible for the development and maintenance of the NIH Administrative Data Base, the Central Accounting System, and the Clinical Information Utility.

Applied Systems Programming Section	administrative and research applications that require data base support including data collection, storage, analysis, and reporting	Mr. J. Emmett Ward Chief 12A/4037 496-6256
Clinical Support Section	data management systems to manage, archive, and retrieve clinical data	Mr. Robert L. Martin 12A/3001 496-3401
Scientific Applications Section	applications that require standard mathematical and statistical techniques as well as a complete data systems package	Mr. William D. Vincent 12A/4033 496-4727
Data Base Application Section	applications that require the use of data base management system techniques and processing	Ms. Mary Lee Dante 12A/4025 496-5693
		Mr. Marvin Katz 12A/4013 496-1138

Computer Systems Laboratory

CSL applies engineering, computer science and expert system technology to problems in laboratory automation, physiological monitoring, image processing, and other applications of computers in biomedical settings. It collaborates with NIH investigators, consults, and offers support in its areas of expertise. Most projects involve minicomputers and microcomputers. CSL does systems engineering, designs and develops hardware and software, and performs system integration and testing. CSL also offers consultation on a variety of networking topics including Ethernet and the IBM PC Net.

Mr. Alan Demmerle
Chief
12A/2033
496-1111

CSL expertise spans several fields:

- laboratory data acquisition and analysis, instrument automation
- patient monitoring, automated diagnostic testing
- computer communications, local area networks, expert systems
- image display, image processing, image analysis.

For more information, call the Laboratory Chief (496-1111), Mr. Perry Plexico or Mr. Daniel Syed (496-1111), or Mr. Arthur Schultz (496-5363). For advice and assistance on local area networks, call Mr. Ronald Fico (496-2251).

Laboratory of Statistical and Mathematical Methodology

The Laboratory of Statistical and Mathematical Methodology (LSM) provides statistical and mathematical help in the computer analysis of biomedical data. LSM offers statistical and mathematical packages for users. It develops methodology in multivariate analysis, biological shape and pattern theory, and curve fitting.

Statistical Software Section

mathematical and statistical computer consulting and package support; statistical program library assistance

SAS Package

SAS/GRAPH Package

SPSS-X

BMDP Package

GRAPH Package

Biomathematics & Computer Science Section

mathematical and computer science consulting, package support, scientific printing, algebra and finite mathematics

interactive program for biomathematical modeling

Statistical Methodology Section

consulting in statistical methodology to assist users of the statistical packages

cluster analysis

Medical Information Science Section

processing of medical English and medical data structuring for efficient storage and retrieval

Dr. James Mosimann
Chief
12A/3045
496-6037

Mr. Ray Danner
12A/3051
496-6037

Mr. Ray Danner
12A/3051
496-6037

Ms. Elvira Agron
12A/3053
496-6037

Ms. Rita Minker
12A/3051
496-6037

Mr. Ray Danner
12A/3051
496-6037

Mr. Marvin Shapiro
12A/3059
496-6037

Dr. George Hutchinson
12A/3045
496-6037

Mr. Marvin Shapiro
12A/3059
496-6037

Dr. James Malley
12A/3053
496-6037

Dr. Gregory Campbell
12A/3049
496-6037

Mr. Marvin Shapiro
12A/3059
496-6037

Mr. George Dunham
12A/3041
496-6119

Laboratory of Applied Studies

The Laboratory of Applied Studies (LAS) engages in independent and collaborative research on innovative applications of mathematics, computer science, and engineering to basic science problems related to biology and medicine. Typical examples of such studies are: modeling, data fitting and analysis of laboratory experiments; design development and evaluation of noninvasive diagnostic methods, e.g., ECG, EEG, and other biological signals; and collection, analysis, and interpretation of biomedical images, e.g., (acoustical, radiological and scintigraphic images, PET scans, and light/electron micrographs). Other examples of such studies are: analysis of noninvasive diagnostic methods; evaluation of physiological modeling systems in health and disease; modeling of biological transport and reaction-diffusion processes as in the microcirculation and in organ systems.

Dr. John Fletcher
Acting Chief
12A/2041
496-1121

Medical Applications Section

combines basic science and computer technologies for direct application in the medical environment; conducts noninvasive studies of pathophysiology; and evaluates biological signals as physiologic indicators, e.g., computer-aided analysis of ECG, EEG, evoked potentials and modalities of diagnostic images.

Dr. James Bailey
12A/2053
496-2847

Applied Mathematics Section

mathematical modeling and data analysis applied to biomedical systems; studies of solution techniques for ordinary and partial differential equations in modeling physiological processes, mechanisms of active transport, simulation of physiological systems and data fitting and analysis in biomedical applications.

Dr. John Fletcher
12A/2041
496-1121

Physical Sciences Laboratory

The Physical Sciences Laboratory (PSL) consults, collaborates, and provides mathematical analysis in biophysics and biochemistry. PSL studies biological phenomena in terms of physics and chemistry by developing theory and sometimes instrumentation for biomedical experiments, relating these to the capabilities of modern computer technology.

applied mathematics, mathematical statistics, differential equations, and stochastic processes

biophysical theory, viscoelasticity, laser and neutron scattering, and statistical physics

chemical physics, macromolecular forces, ion transport, enzyme kinetics and molecular assembly

computers in scientific communication and publication

Dr. George Weiss
Chief
12A/2007
496-1135

Dr. George Weiss
12A/2007
496-1135

Dr. Ralph Nossal
12A/2001
496-1135

Dr. Adrian Parsegian
12A/2007
496-1135

Dr. Adrian Parsegian
12A/2007
496-1135

NIH Central Computer Utility

IBM System 370 Hardware

The IBM System 370 facility is an integrated complex consisting of five computational kernels interconnected by shared direct access storage and one test and development processor. The processors are six IBM Model 3090-200's with 64 megabytes of memory. Each has 48 data channels: 4 byte multiplexor and 44 block multiplexor. Three processors are equipped with Vector Facilities that provide supercomputing power.

The shared direct access storage complex consists of over 475 spindles of 3350, 3380, and 2305 enabling cross-processor communication. In addition, the system has a complement of several hundred peripheral devices, including:

- 3480 cartridge tape drives (18 track, 38,000 BPI)**
- 3420-6 tape drives (6205/1600 BP)**
- 3420-5 tape drives (7 and 9 track, for inter-installation compatibility)**
- 3800-3 printing subsystems**
- 3203-5 printers**
- 1403-N1 printers**
- 2540 card reader/punches**
- 6670 information distributor**
- 925/1055 CalComp plotter**
- SD-4561 microfilm recorders**
- 8010 Datastream protocol converters**

Most peripheral devices can be manually switched to one or more processors, for minimal disruption of service in case of component failure.

IBM System 370 Software

The software servicing the IBM System 370 facility is composed of a highly customized version of OS/VS2 MVS Release 3.8 with JES2 NJE Multi-Access Spool. This complex operating system package presents a unified system concept to the end user. It provides the automatic load balancing and fail-soft capability that controls the concurrent execution of over 60 batch jobs.

WYLBUR, **TSO**, **IMS**, and **DB2** are the interactive services co-existing with the batch processing. The flexible facilities of **KERMIT** and the **Protocol Conversion Facility** allow a great variety of terminals and microcomputers to access these interactive services.

The **TYMNET** network allows access to the facility from remote locations worldwide, while **BITNET** permits the sending and receiving of messages, mail, and files from hundreds of computers in the U.S., Canada, and Europe.

For user assistance, contact:

PAL Unit
12A/1017
496-5525

DECsystem-10 Hardware

The DECsystem-10 timesharing system consists of symmetric processors sharing memory. The processing units employed are:

3 KL-10 processors sharing 2.5M words of memory

The peripheral devices include:

RP06 disk drives

RP07 disk drives

TU70 tape drives (9 track, 800/1600 BPI)

TU72 tape drives (9 track, 6250/1600 BPI)

Eight communications front-end computers, internally networked for high reliability, connect the computer to dial-in phone lines and TYMNET lines. Additional links connect the DECsystem-10 complex to the IBM System 370, user workstations, and other NIH computers.

All types of peripherals are available to all processors, providing non-idle redundancy and minimal disruption of service in the event of any subsystem or component failure.

Graphic support is provided for the following equipment:

Computer Center's CalComp plotters

ZETA plotter

Tektronix graphics displays (and emulators)

DECsystem-10 Software

The operating system for the DECsystem-10 is TOPS-10 version 7.03. The Tri-SMP option used at NIH provides highly reliable multiprocessing and multiprogramming in a virtual memory environment. TOPS-10 is designed for concurrent operation of interactive timesharing, multistream batch, and remote communications. Available software includes:

Programming Languages: APLSF, BASIC, C, FORTRAN, Macro, and Pascal

Programming Utilities: Interactive program debugging and cross-referencing tools

Graphics: Omnigraph, POSTER, and GRAPH

Text Editing: SOS and TVEDIT

Text Formatting: PLUTO, PUB, and RUNOFF

Scientific and Statistical Packages: BRIGHT, IMSL, MLAB, SPSS-X, DNA and protein sequence analysis

Inter-Computer Communications: CLINK, KERMIT, and MERCURY

For user assistance, contact:

Laboratory Systems Unit

12B/2N207

496-4823

Personal Workstation Office

The Personal Workstation Office (PWO) provides technical assistance, guidance, and training to NIH employees in the use of specific personal computer workstations and related personal computer products.

The PWO supports models of IBM PC/AT, IBM PC/XT and IBM PS/2 personal computers, with hard disks and associated equipment. Training and technical assistance are provided on specific software used on these computers.

PC Software and Languages

The major software supported by the PWO for use at NIH include:

dBASE III Plus
DisplayWrite 3/4
KERMIT
Lotus 1-2-3
PC DOS
PCPLOT III
Personal Editor II
SIDEWAYS
SPSS/PC+
TELIO
Word Perfect

For additional information on supported products, refer to the *Personal Workstation Office Product Information Guide*, available by calling 496-2282.

Lead Users

Lead users from each BID serve as focal points for PC information: handling questions regarding personal computers, training other staff members, and communicating information to the PC user community.

CC	Alice Faust.....	10/7D47 496-7946
CC	Gerane Sever	10/2C318 496-2431
CC	John Stimpson.....	10/2C311A 496-1028
DCG	Barbara Duke	31/1B44 496-4487
DCG	Patricia Greenfield	31/1B06 496-6431
DCG	Steven Thornton	31/1B44 496-4487
DCG	James Vennetti.....	31/1B03 496-4422
DCRT	Brian Cole	12A/4027 496-5693
DCRT	Roger Fajman	12/2239 496-5181
DCRT	Mark Haven	12/2266 496-2627
DCRT	Martha Horton.....	12A/2047 496-2847
DCRT	Robert Klein	12A/1033 496-5524
DCRT	William Risso.....	12A/3015 496-0996

DCRT	James Sullivan	12A/2023 496-5362
DRG	Charles Casey	Westwood/1A18 496-7401
DRG	Betty Kupinsky	Westwood/125 496-7337
DRG	JoAnn McConnell	Westwood/152 496-7846
DRG	Robert Moore	Westwood/157 496-7711
DRG	Betty June Myers	Westwood/2A11B 496-7568
DRG	Betty Pollard	Westwood/1A07 496-7264
DRR.....	Jean Babb	31/5B62 496-6103
DRR.....	Diana Jaeger	31/5B32 496-9840
DRR.....	Delores Lee	31/5B62 496-6103
DRR.....	Barbara Perrone	31/5B58 496-5507
DRR.....	Paul Schulze	31/5B62 496-6103
DRS.....	James Ellis	13/3W13 496-4472
DRS.....	Andre LeRoy	13/3W13 496-2966
DRS.....	Carol S. Martin	12A/4053 496-4501
FDA DBB.....	Phil McGrath	29/518 496-2945
FDA DBBP	Sue Preston	29/306 496-4833
FDA DBP	Betty Hiner	29/118 496-5045
FDA DISD.....	Herb Dorsey	29/111 443-5368
FDA DISD.....	David Moss	29/111 443-2836
FDA DISD.....	Linda Pelleu	29/111 443-5368
FDA DPQC.....	Dr. Edward Fitzgerald	29A/1A19 496-4937
FDA DV	Dr. Jay Siegel	29A/2B12 496-4792
FDA OM.....	Kathy Ginsberg	29/104 496-4357
FIC.....	Ellie Menser	38A/604 496-4625
FIC.....	Wanda Pifer	16A/101 496-6167

FIC.....	Eileen Trevison.....	38A/615 496-1653
NCI.....	Pete Bostian.....	FCRF 321/15 8-695-1060
NCI.....	Rita Burke.....	82/223 496-8882
NCI.....	Dick Carter.....	FCRF 427/3 8-695-1106
NCI.....	Bud Erickson.....	Landow/8C16 496-9601
NCI.....	Bob Esterhay.....	82/201 496-8882
NCI.....	Toby Friedberg.....	Westwood/420 496-7391
NCI.....	Arthur W. Goulet.....	31/4A32 496-1038
NCI.....	Kent Hevner.....	82/105 496-7403
NCI.....	Margaret Holmes.....	Blair/714 427-8663
NCI.....	Ethlyn Howard.....	37/6A09 496-6007
NCI.....	Steve Hughes.....	Westwood/8A03 496-4892
NCI.....	Cecil Lee.....	82/121 496-7403
NCI.....	Bill Miller.....	Landow/9B01 496-4141
NCI.....	Bill Milne.....	Landow/5A04 496-8747
NCI.....	Jean Noe.....	41/D507 496-9489
NCI.....	Vivian Pelham.....	Blair/514 427-8833
NCI.....	Thomas Perine.....	31/4A32 496-1038
NCI.....	Linda Pickle.....	Landow/3A10 496-6425
NCI.....	Carl Prosperi.....	31/4A32 496-1038
NCI.....	Manuel Salazar.....	31/4A32 496-1038
NCI.....	Judy Steckel.....	10/4B17 496-5461
NCI.....	Boyd Stephenson.....	Landow/1201 496-1606
NCI.....	William Straile.....	Blair/727 496-8818
NCI.....	Betty Ann Sullivan.....	31/4A32 496-1039
NCI.....	Larry Willhite.....	31/3A05 496-3381
NCNR.....	Mary Nuss.....	31A/Conf Rm 3 496-0472
NCR.....	Charles Zellers.....	31/3B19 496-8230

NEI	Paul Edwards	10/10N226 496-3577
NEI	Carmen Richardson	31/6A11 496-5243
NEI	Dr. Gerald Robison	9/1E104 496-3161
NHLBI	Alice Cheng	31/5A11 496-3620
NHLBI	Allan Czarra	Federal/520 496-4186
NHLBI	Rosalie Dunn	Federal/312 496-1586
NHLBI	Louise Duvall	31/5A17 496-8992
NHLBI	Dee Gilmore	Federal/5A08 496-1817
NHLBI	Carol Haines	31/4A18 496-1051
NHLBI	Dr. Joseph S. Handler	10/6N307 496-1268
NHLBI	Sondra Jefferson	Westwood/632 496-7875
NHLBI	Naomi Josloff	Westwood/632 496-7875
NHLBI	James Kiley	Westwood/6A07 496-7171
NHLBI	Cheryl Laughery	Federal/3C16 496-1326
NHLBI	Loretta Layton	Westwood/6A12A 496-7984
NHLBI	Ruby Lewis	31/5A17 496-8992
NHLBI	Leonard Mihalko	31/5A17 496-8992
NHLBI	Stephen Mockrin	Federal/440 496-1857
NHLBI	Liz Pitt	31/5A03 496-5031
NHLBI	Sheila Pohl	31/4A04 496-5437
NHLBI	Tina Roark	Westwood/7A11 496-7893
NHLBI	David Robinson	Federal/412 496-5656
NHLBI	Linda Shaw	Westwood/554 496-7265
NHLBI	John Stanford	31/5A17 496-8992
NHLBI	Daniel States	10/6D10 496-5020
NHLBI	Ralph Van Wey	Westwood/632 496-7875
NHLBI	William Wagner	Westwood/632 496-7875
NHLBI	Melissa Yorks	31/4A21 496-4236

NIA	Ron Abeles	31/4C32 496-3136
NIA	Charles Blackwood	31/5C05 496-9322
NIA	Julie Burke	31/5C06 496-9777
NIA	Anne Connors	31/2C11 496-5898
NIA	Mary Lafferty	Federal/612 496-9795
NIA	Shirley McKenney	31/5C39 496-1472
NIA	Carolyn Phillips	Federal/612 496-9795
NIA	Marilyn Schoenfelder	31/2C11 496-5898
NIAAA	Michael Kerich	101/3B19 496-9765
NIAAA	Ronni Nelson	10/3C103 496-6747
NIAAA	Laura Rosenthal	10/3C103 496-6747
NIAAA	Charles Willoughby	443-1370
NIAID	Joe Bangiolo	31/7A47 496-6490
NIAID	Marie Chang	Westwood/733 496-7013
NIAID	Craig Kennedy	31/7A10 496-4701
NIAID	Louise Kreh	Westwood/726 496-7075
NIAID	Karen McVay	Westwood/726 496-7075
NIAID	Sue Pinter	Westwood/733 497-7013
NIAID	Marrietta Robinson	Westwood/726 496-7075
NIAID	Doris E. Sweet	Westwood/703 406-7013
NIAID	Betty Sylvester	10/11C101 496-5270
NIAID	Mark Vanraden	Westwood/739 496-7065
NIAID	Dr. C. David Wise	31/7A47 496-6490
NIAMS	Steven Hausman	Westwood/403C 496-7495
NIAMS	Carolyn McHale	31/4C19 496-6051
NIAMS	Diane Watson	Westwood/403 496-7326
NICHD	Lynda Bennett	31/2A08 496-1877
NICHD	Ernest Harley	Landow/8A08 496-1073

NIDDK.....	David Badman.....	Westwood/621 496-7458
NIDDK.....	Gloria Barnes.....	10/9N222 496-1863
NIDDK.....	Gary Felsenfeld.....	2/301 496-4173
NIDDK.....	Emily McDonald.....	31/9A47 496-5765
NIDDK.....	William Mowczko.....	31/9A47 496-6693
NIDDK.....	Dr. Donald C. Murphy.....	Westwood/3A15A 496-7455
NIDDK.....	Richard A. Pledger.....	Westwood/404 496-7306
NIDDK.....	Anne Robertson.....	31/9A47 496-6693
NIDDK.....	Constance D. Strain.....	Westwood/603 496-7851
NIDDK.....	Thomas G. Turley.....	Westwood/653 496-7467
NIDR.....	Carla Flora.....	Westwood/539A 496-7843
NIDR.....	Dr. George Hausch.....	Westwood/519 496-7658
NIDR.....	William Jackson.....	10/6S255 496-8077
NIDR.....	Ronald Ruben.....	Westwood/539B 496-7843
NIDR.....	Lisa Wespasnick.....	30/131 496-5715
NIDR.....	Mary Ann Williamson.....	Westwood/535 496-7823
NIEHS.....	Debra Parrish.....	8-629-4941
NIGMS.....	Yin-Ling Chien.....	Westwood/9A10 496-7303
NIGMS.....	G. Earl Hodgkins.....	Westwood/9A03 496-7123
NIGMS.....	Thomas Mitchell.....	Westwood/9A15 496-7927
NIMH.....	Jean Colison.....	10/4N214 496-6296
NIMH.....	Marcia D. Minichiello.....	10/3D41 496-3421
NIMH.....	Richard Newell.....	36/2A03 496-4957
NINCDS.....	Ron Brown.....	Federal/904 496-9244
NINCDS.....	Brenda Dyer.....	Federal/718B 496-4677
NINCDS.....	Sue Titman.....	10/5N216 496-1116
NLM.....	Joyce Backus.....	38/1W22 496-6097

NLM.....	Alvin Barnes	38A/B1N14K 496-5708
NLM.....	Kevin Beverly.....	38/B1E21 496-8124
NLM.....	Bob Curry	38A/2N223 496-1351
NLM.....	Sean Donohue	38/2S15 496-2311
NLM.....	Gale Dutcher	38/B1E23 496-5511
NLM.....	Carol Evans	38/B1E03 496-4777
NLM.....	Mike Ewing	38/1N05 496-5560
NLM.....	Reggie Frazier	38/B1W28 496-3261
NLM.....	Stella Graves.....	38/2N09 496-4943
NLM.....	Lillian Kozuma	38/B1E21 496-5963
NLM.....	Craig Locatis.....	38A/B1N30M 496-6280
NLM.....	Dianne McCutcheon	38/B1W20A 496-1218
NLM.....	Garland McElveen	38/B1W17 496-1495
NLM.....	John Murphy	38/B1E23 496-5511
NLM.....	Stanley J. Phillips.....	38/2N13 496-6491
NLM.....	Young Rhee.....	38/B1E21B 496-5963
NLM.....	Lillian Scanlon.....	38A/B1N30L 496-6280
NLM.....	Nancy Selinger	38/B1W27 496-3294
NLM.....	Susan Buyer Slater	38/2S14 496-2311
NLM.....	Joe Thomas.....	38/1N08 496-5497
NLM.....	Michele G. Williams.....	38A/2S209 496-6071
NLM.....	Janet Zipser	38A/4N421 496-6193
OD DCG.....	Loren Ziller	31/1B19 496-6385
OD DFM.....	Gene Belt	31/B1B54 496-3163
OD DFM.....	Wayne Berry	31/B1B11 496-5287
OD DFM.....	Wayne Crum.....	31/B1B02 496-5635
OD DFM.....	Spiro Papagjika.....	31/B1C25 496-6115
OD DFM.....	Virginia Samson	31/B1C15 496-3417

OD DFM.....	Carla Smith.....	31/B1C15 496-3417
OD DFM.....	Charlotte Turner.....	31/B1C25 496-6115
OD DIR	Patty Austin.....	31/1B63 496-1493
OD DIR	Florence Gardner.....	1/10 496-1318
OD DIR	Wayne Heiden.....	1/237 496-8242
OD DMP.....	Doris Dorin	31/B2B47 496-5025
OD DMP.....	Sue Feldman	31/3B11 496-2832
OD DMP.....	Linda Jackson.....	31/3B07 496-3536
OD DMP.....	George Murray.....	31/3B07 496-2832
OD DPM.....	Theresa Langston.....	31/B3C27 496-4368
OD DPM.....	Nelson Sparks.....	31/1C27 496-1443
OD OA	Michael Payne.....	31/1B43 496-4494
OD OA	Valerie Pickett.....	31/1B44 496-4487
OD OA DMSR.....	Diane Dean	31/4C02 496-5586
OD OERT	Corinne Gillis.....	1/209 496-9743
OD OERT	Dr. Doris Merritt.....	1/209 496-9743
OD OMAR	Elsa Bray	1/216 496-1143
OD OPPE.....	Sheldon Fishman	31/4C35 496-9291
OD OPPE.....	Bill Rhode	31/4C35 496-9285
OD ORS.....	Jon T. Adsit	13/2W48 496-5037
OD ORS.....	Linda L. Alger.....	31/4B32 496-1004
OD ORS.....	Belva Artis	31/3C32 496-5401
OD ORS.....	Beth Augustin	31/4B32 496-1004
OD ORS.....	Kate Benson.....	13/4B32 496-1004
OD ORS.....	Kathleen Courie.....	31/4B04 496-3172
OD ORS.....	William Dickey	13/3K64 496-2960

OD ORS.....	Dave Epley.....	13/2W48 496-5037
OD ORS.....	Don Fletcher	13/2W21 496-4895
OD ORS.....	Craig Gavin.....	31/B3BN05 496-6077
OD ORS.....	Nancy A. Hensley.....	31/4B32 496-1004
OD ORS.....	JoAnn Holmes	31/3C02 496-5401
OD ORS.....	Dr. John Irwin	10/B2S239 496-6017
OD ORS.....	John Jenkins.....	13/2W48 496-5037
OD ORS.....	Terry L. Jones.....	31/4B32 496-1004
OD ORS.....	Ronald Jordan	13/2E58 496-0981
OD ORS.....	Dr. Harry Mahar	13/3K07 496-3353
OD ORS.....	Pam Middleton.....	31/4B32 496-1004
OD ORS.....	John Pavlides.....	13/2W48 496-5037
OD ORS.....	Timothy Pickett	31/B1C02 496-3211
OD ORS.....	Thelma Ricks	13/2E58 496-0981
OD ORS.....	Ricky Rodriguez.....	13/2W01 496-6253
OD ORS.....	Brian Rooney	31/4B04 496-3172
OD ORS.....	Patricia West.....	31/3B48 496-3517
OD ORS.....	Kathy Wimsatt	31/B1C39 496-4316
OD ORS.....	Robert Zoon.....	21/106 496-5774

Programs/Packages

The computer system used follows each program description: IBM System 370 (IBM), DECsystem-10 (DEC), Digital Equipment Corporation VAX 11-80 (VAX), IBM PC/AT Model 99 and/or IBM PC/XT Model 86 (PC), or Data Translation LSI-11 (LSI).

ABC (Independent Training Assisted By Computers)

An online training system that allows students to take courses from a terminal, from printed lessons, or from any convenient combination of the two. Courses offered include: *Computer Literacy*, *Job Control Language*, and various WYLBUR topics. ABC courses are accessed through WYLBUR's ENTER ABC command. (IBM)

PAL Unit
12A/1017
496-5525

ALP

A preprocessor that aids in writing structured assembly language programs. Features include improved syntax, automatic indentation, and a full set of control structures. (IF-THEN-ELSE CASE, WHILE, FOR) for controlling both execution time and assembly time (macro) processing. A package of useful macro definitions is included. (IBM)

PAL Unit
12A/1017
496-5525

AUTOTAB II

An easy-to-use software package to create and update tables of numbers. Requires only basic information (about rows, titles, column headings, initial values, and calculations needed) to produce attractive final reports. Consolidates related tables so that changes in one table can be rippled through all others in the group. WYLBUR command procedures can be used in conjunction with AUTOTAB programs to create spreadsheet analysis systems. (IBM)

Mr. Ivan Soroka
12A/3063
496-3401

BITNET

A network joining computers at universities and research organizations throughout the United States. Messages, mail, and files can be transferred between computers on the network. There are two nodes at NIH, NIHCU for the IBM System 370 and NIHCUDEC for the DECsystem-10. (IBM, DEC)

PAL Unit
12A/1017
496-5525

and

Laboratory Systems Unit
12B/2N207
496-4823

BLOSSOM

A collection of programs that perform common statistical procedures for use with Lotus 1-2-3. Includes t-tests, Chi-squared, and procedures for fitting lines and curves to data. Also includes programs for survival analysis and a program for drawing XY graphs with confidence limits. Implemented as 1-2-3 macros, these programs are designed to eliminate the need for many 1-2-3 users to transfer data to other systems for analysis. (PC)

Mr. Brian Cole
12A/4027
496-5693

BMDP (UCLA Biomedical Computer Programs)	A collection of programs that perform a wide variety of univariate and multivariate statistical computations. All programs accept the same set of control language sentences written in an elemental key-word-oriented language. (IBM)	Mr. Ray Danner 12A/3051 496-6037
BRIGHT	A conversational data analysis and data management system for nonprogramming scientists and administrators. BRIGHT is an instant data-retrieval system as well as a data manipulation system. Features: easy entry of data, numerical calculations, high-quality graphs, statistics, access to CIU (Clinical Information Utility) data. (DEC)	Mr. Brian Cole 12A/4027 496-5693
C	A concise programming language with modern flow control and data structures. (DEC)	Laboratory Systems Unit 12B/2N207 496-4823
C-LAB	An interactive computer program that provides a variety of cluster and classification algorithms to the user. (DEC)	Mr. Marvin Shapiro 12A/3059 496-6037
CLINK (Communications Link)	Transfers files via asynchronous telecommunications line between a DECsystem-10 running TOPS-10 and a PDP-11 running RT-11 or RSX-11M. Uses the Digital Data Communications Message Protocol (DDCMP) to provide automatic error detection and correction. CLINK also can operate in virtual terminal mode, which permits a terminal physically connected to a PDP-11 to appear to be connected directly to the DECsystem-10. (DEC)	Mr. Keith Gorlen 12A/2017 496-5361
CP Tools	An integrated set of WYLBUR Command Procedures that includes an advanced editor that extends WYLBUR. One tool permits local editing, including cut and paste of WYLBUR files on the NIH8188 terminal. Another tool directly prints onto the terminal's attached printer--without writing on the screen. There are JCL generators for running SLANG and SFOR as well as for microficheing any number of OUTPUT HOLD jobs.(IBM)	Mr. Robert Magnuson 12A/4021 496-6256
CSA (Conversational Statistical Analysis)	An online (TSO) system to provide the user with data manipulation, statistical analysis, and plots. Using information gathered via English-type prompts, SAS code is generated and executed. The background consists of 13 SAS procedures, 2 SAS/Graph procedures and 1 BMDP procedure. (IBM)	Mr. George Roberts 12A/4029 496-5694

Data Base 2 (DB2)	IBM's Data Base 2 is a powerful relational data base management system available to all users. Data bases in DB2 can be created, queried, and modified interactively. New or revised reports can be generated easily.(IBM)	PAL Unit 12A/1017 496-5525
dBASE III Plus	A relational data base management package. (PC)	PWO 31/3B23 496-2282
DisplayWrite 4	A word processing package that emulates the IBM DisplayWriter at the Textpak-6 level. (PC)	PWO 31/3B23 496-2282
DISSPLA	A library of plotting subroutines that can be used through TELL-A-GRAF to produce virtually any type of graphical display. Three-dimensional curves and surfaces and contour plots in black and white or color are among its capabilities. (IBM)	PAL Unit 12A/1017 496-5525
DNA:DRAW	A computer program that prepares and plots DNA sequences of publication quality. (DEC)	Mr. Marvin Shapiro 12A/3059 496-6037
Dr. Halo	A free-form graphics drawing and editing program. (PC)	Ms. M.A. Douglas 12A/2047 496-2847
Electronic Spread Sheet (ESS)	A mainframe spreadsheet package available under TSO. ESS spreadsheets can be shared among users at various locations.(IBM)	PAL Unit 12A/1017 496-5525
FOIL3800	Permits printing of large characters on the IBM System 370's laser printers. The printed pages can be used to make foils (transparencies) for overhead projection. (IBM)	PAL Unit 12A/1017 496-5525
GenBank (R)(Genetic Sequence Data Base)	GenBank (R) is a large data base containing DNA sequences and related information. This data base is maintained at Los Alamos National Laboratory and distributed by Intelligenetics, Inc. It is stored online and is updated regularly. (DEC)	Laboratory Systems Unit 12B/2N207 496-4823

GRAPH	An interactive program for drawing publication quality graphs. The user specifies the titles, labels, data, and overall size of a graph, which is then displayed and plotted if desired. Many options are available, including bar graphs, shading, error bars, thick lines, and lines that do not intersect shapes. (DEC)	Mr. Marvin Shapiro 12A/3059 496-6037
HALO Graphics	HALO is a general purpose subroutine library having over 170 graphics functions. (PC)	Ms. M.A. Douglas 12A/2047 496-2847
IMS	Data base management system for interactive interrogation and maintenance of large data bases. (IBM)	Mr. Jack Halverson 12B/2N207 496-6665
IMSL (International Mathematical and Statistical Libraries Package)	An extensive collection of FORTRAN and PL1 callable subroutines that perform a wide variety of mathematical and statistical computations. (IBM, DEC)	Mr. Ray Danner 12A/3051 496-6037
Information EXCHANGE	An online facility for users to share information on software, research data, or any other information related to work being done at NIH or the Computer Center. The Information EXCHANGE is accessed through WYLBUR's ENTER EXCHANGE command. (IBM)	PAL Unit 12A/1017 496-5525
IRS (Inquiry and Reporting System)	Extracts information from fixed format computer files and provides basic data processing operations; produces card, printer, tape, and disk output. Generates printed reports and summaries designed to user specifications. (IBM)	Mr. Dick Baxter 12A/3001B 496-3401
ISPF/PDF (Interactive System Productivity Facility/ Program Development Facility)	Eases the development of custom designed interactive and full-screen applications. Can be accessed directly from TSO or from the main DB2 menu. (IBM)	PAL Unit 12A/1017 496-5525
KERMIT	A file transfer package for transferring files among personal and NIH mainframe computers. Terminal emulation also is provided. Supported microcomputer versions are those for the IBM PC and Apple II. (DEC, IBM)	PAL Unit 12A/1017 496-5525 and Laboratory Systems Unit 12B/2N207 496-4823
Lotus 1-2-3	A spreadsheet program that also has data base management and graphics capabilities. (PC)	PWO 31/3B23 496-2282

MARK IV	Enables the development of file management systems at the system analysis level. Allows the experienced programmer to prepare reports, retrieve specific data, perform calculations, maintain files and provides interface capability with IMS data base files. (IBM)	Mr. Joe Campbell 12A/4019 496-2546
MERCURY	A program to transfer data and jobs between the DECsystem-10 and IBM System 370 facilities. It prompts the DECsystem-10 user through a question-and-answer dialogue and generates all JCL to transfer or list files, output files on microfiche, and submit batch jobs to the IBM System 370. (DEC)	Laboratory Systems Unit 12B/2N207 496-4823
MLAB (Modeling Laboratory)	An interactive computer program that allows the user to define models and specify data to be curve fit, to solve differential equations, and to produce high-quality graphic plots. Also included are facilities for Fast Fourier Transforms, smoothing, definite integrals, three-dimensional surface graphs and contour plots, eigenvalues and eigenvectors, cluster analysis operations, and root finding. MLAB is particularly useful for chemical kinetics and equilibrium binding models, for NMR models and for pharmacological and other compartmental modeling. (DEC)	Mr. Marvin Shapiro 12A/3059 496-6037
ODE (Ordinary Differential Equations)	Ordinary stiff and nonstiff differential equations, as models of biological systems. (IBM, DEC)	Mr. Richard Shrager 12A/2055 496-1122
OMNIGRAPH	An NIH-developed interactive graphics system for displaying pictures on a variety of graphics terminals. Routines are callable from SAIL, PASCAL, FORTRAN, or BASIC. Selected pictures can be plotted on offline CalComp or remote online ZETA plotters. (DEC)	Laboratory Systems Unit 12B/2N207 496-4823
PC DOS	The Disk Operating System for the IBM PC. (PC)	PWO 31/3B23 496-2282
PCPLOT III	An asynchronous communications package that emulates Tektronix 4010 and 4027 and DEC VT100 terminals. (PC)	PWO 31/3B23 496-2282
PDE PRGMS	Techniques and software used to solve partial differential equations arising in mathematical modeling of biological systems. (IBM, DEC)	Dr. John Fletcher 12A/2041 496-1121
PDOC (Program Documentation System)	An advanced document compiler, PDOC is a front-end to the WYLBUR Document Formatter. Facilities include use of symbolic referencing, source-selection logic, a box-drawing language, chapter-oriented generic figures, automated underlining, generated tables of contents, and figures. (IBM)	Mr. Robert Magnuson 12A/4021 496-6256

Personal Editor II	A full screen editor with some word processing features. (PC)	PWO 31/3B23 496-2282
PIC	An integrated package of FORTRAN programs and subroutines for image processing with emphasis on the particular requirements for structural analysis of biological macromolecules. PIC was designed as an interactive system, though batch may now be easily performed. (VAX)	Dr. Benes Trus 12A/2053 496-2250
POSTER	A flexible text processor for creating posters. POSTER input consists of any text and embedded commands for defining the layout of the poster. POSTER output can be directly previewed on a graphics display, and the final version plotted on paper. (DEC)	Laboratory Systems Unit 12B/2N207 496-4823
PPE (Problem Program Evaluator)	A tool for improving the execution efficiency of heavily used programs. Produces plots showing where the program uses most of its CPU time. (IBM)	PAL Unit 12A/1017 496-5525
Protocol Conversion Facility	Allows ASCII terminals and personal computers to access full-screen applications such as DB2, ESS, ISPF/PDF and SAS/FSP. These TSO-based applications were designed for use with 3270-type terminals. (IBM)	PAL Unit 12A/1017 496-5525
Protein Sequence Data base	The Protein Sequence Data base of the Protein Identification Resource (PIR) is a large data base containing protein sequences and related information. This data base is distributed by the National Biomedical Research Foundation. It is stored online and is updated regularly. (DEC)	Laboratory Systems Unit 12B/2N207 496-4823
PSTAT (Princeton Statistical Package)	An executive program presides over a variety of procedural programs that do statistical calculations and file manipulation. The user communicates with PSTAT by means of a free-form, syntax-oriented command language. Data files of up to 5,000 variables may be input. PSTAT runs in both batch and time sharing modes. (IBM)	Mr. Dave VanSant 12A/4050 496-1686
PUB & PLUTO	PUB is a document formatting program that includes such advanced capabilities as columnar output, footnote placement, table of contents and index generation, automatic numbering of chapters, figures, and tables, etc., and cross-referencing. PLUTO is a system designed to take advantage of PUB's features without requiring knowledge of the complexities of PUB's syntax and operation. (DEC)	Laboratory Systems Unit 12B/2N207 496-4823

REDUCE 3	A programming system for symbolic algebraic manipulation. It is an interactive system used for symbolic operations on polynomial and rational functions, matrices, etc. Its capabilities include pattern matching, simplification of expressions, symbolic differentiation, tensor operations, and a variety of other symbolic manipulations. (DEC)	Dr. George Hutchinson 12A/3045 496-6037
Regional Analysis of Biological Images	Analysis of data already in digital format involving: extraction of dynamic parameters from two-dimensional fields such as sequential scintigrams, micrographs, delineation of regions of interest, etc. (VAX, DEC, PC)	Ms. M.A. Douglas 12A/2047 496-2847
RMAG (Recursive Macro Actuated Generator)	For the generation of source language coding, data, text, and arbitrary strings. RMAG22, the current version, is available in both stand-alone and subroutine callable varieties. Available to higher-order and assembly language programmers by means of simple subroutine calls. Runs on IBM System 370 (under OS or VS) but may be used to generate programs, commands or input for most other computers. (IBM)	Mr. Robert Magnuson 12A/4021 496-6256
SAS	A powerful statistical and file manipulation package that allows the user to program statistical computations and data manipulation in a flexible PL/1-like language. Easily reads data files not usable by most other statistical packages because of their organization (e.g., hierarchical files, SMF files). This most powerful of LSM-offered packages runs in both batch and timesharing modes. SAS/GRAPH is an extension to SAS that produces color plots, charts, maps, and other displays on screens and plotters. (IBM)	Mr. Ray Danner 12A/3051 496-6037
SASM	Structured programming tool for IBM Personal Computer assembly language programmers. (PC)	Mr. Robert Magnuson 12A/4021 496-6256
SCSS (SPSS Conversational Statistical System)	An interactive statistical package that offers a range of capabilities, from simple tables and plots to multiple regression and factor analysis. It is easy to use and offers help and explanations when requested. (IBM, DEC)	Ms. Rita Minker 12A/3051 496-6037
SFOR	Structured programming tool for IBM System 370 FORTRAN language programmers.	Mr. Robert Magnuson 12A/4021 496-6256
SIDEWAYS	This package allows the flexible control of sideways printing and offers a Lotus 1-2-3 type of user interface.(PC)	PWO 31/3B23 496-2282

Signal Processing Facility	Analog-to-Digital conversion, realtime spectral analysis for data recorded on half-inch IRIG compatible analog tape at speeds: 1 7/8, 3 3/4, 7 1/2, 15, 30, and 60 ips. (LSI)	Dr. Erik Pottala 12A/2061 496-2959
6670 (Scientific Printing)	Permits high-quality printing of scientific manuscripts containing Greek letters, superscripts, and subscripts. It allows full use of WYLBUR's document formatting capabilities and is accessed through the ENTER 6670 command.(IBM)	PAL Unit 12A/1017 496-5525
SLANG	Structured programming tool for IBM System 370 assembly language programmers, with many powerful features: automatic indentation to show structure, automatic generation of translate tables and their inverses, and the RMAG macrofacility. (IBM)	Mr. Robert Magnuson 12A/4021 496-6256
SOS	The most popular line-oriented text editor on the DECsystem-10. Single character, easily learned commands let users delete, insert, and alter lines, format paragraphs, access a secondary file, etc. SOS automatically creates 2 backup files and saves edits regularly. (DEC)	Laboratory Systems Unit 12B/2N207 496-4823
SPSS/PC+	The PC version of the mainframe SPSS statistical package. (PC)	Ms. Rita Minker 12A/3051 496-6037
SPSS-X (Statistical Package for the Social Sciences, Extended)	SPSS-X offers the user a large assortment of univariate and multivariate statistical procedures. It can read intricate file and record structures and handle string data. (IBM, DEC)	Ms. Rita Minker 12A/3051 496-6037
Survival System	A means of obtaining life tables and plots of survival curves, observed and relative survival rates, and option to compute median survival time. Provision is also made for creating cohort sub-categories, selection and exclusion of cases, and handling of multiple codes. (IBM)	Mr. Sigurd Knisley 12A/4024 496-5693
Symbolic Logic Retrieval System	An RMAG encoded generator, reading free-form specifications of the file structure. Generates a customized COBOL Program to retrieve selected records from the user's file. (IBM)	Mr. Robert Magnuson 12A/4021 496-6256
Telios	Telios is used to communicate with other computers, including the IBM System 370 and DECsystem-10 systems at the NIH Central Computer Utility. It can also be used for terminal emulation and file transfer. (PC)	PWO 31/3B23 496-2282

TELL-A-GRAF	A flexible, easy-to-use conversational graphics program. It uses English-like commands that can be learned quickly, and it does not require programming experience to use. TELL-A-GRAF is capable of driving a wide variety of graphics terminals or plotters. (IBM)	PAL Unit 12A/1017 496-5525
TSO (Time Sharing Option)	A general-purpose timesharing system that permits interactive programming in FORTRAN, COBOL, PL1, VS BASIC, PASCAL/VS, and Assembly language. Offering conversational access to the facilities of the IBM System 370, TSO supports up to 160 concurrent terminal sessions. (IBM)	PAL Unit 12A/1017 496-5525
TVEDIT	A full-screen editor that continuously shows one full screen's worth of the file being edited. Changes made to the file appear on the screen as they occur. (DEC)	Laboratory Systems Unit 12B/2N207 496-4823
TYMNET	A public data network for users outside the metropolitan Washington, D.C. area. Significantly reduces long-distance telephone charges. (IBM, DEC)	Dedicated Equipment Services 12A/1039 496-2248
Vector Facility	An enhancement to the central processors that can execute vector arithmetic and logical instructions on groups of up to 128 elements with a single instruction. Provides supercomputing power for compute-intensive tasks. (IBM)	PAL Unit 12A/1017 496-5525
VMAP	A batch program used to print scientific text on 8 1/2- by 11-inch cut sheets, 12 pitch, using the IBM 6670 as a printer. Greek letters, script capital letters, subscripts and superscripts, many special symbols including oversized symbols, limited capability for accents and understrikes, ability to make boxes, tables and some arrows. (IBM)	Ms. Mary Hodges 12A/3045 496-6037
WYLBUR	An interactive system supporting over 700 keyboard terminals simultaneously. Capabilities of the English-like commands include: text editing, word processing, data manipulation, document formatting, command procedures, remote job entry and retrieval, and electronic mail. Also available under the TSO timesharing system. (IBM)	PAL Unit 12/1017 496-5525

Publications

DCRT distributes two types of publications: technical documents (for users of its computer facility) and public information documents (for anyone).

Documents for Users

Technical Information Office

Prepares technical information and distributes technical documents for the Central Computer Utility. Supports the Division's computer training program, and maintains reference materials.

Mrs. Patricia Cleveland
12A/1017
496-5431

Documentation for the IBM MVS/Extended Architecture (automatic update):

- Assembler manuals
- COBOL manuals
- Computer Center Users Guide*
- Computer Training Catalog and Schedule*
- DCRT Mathematical & Statistical Program Manual*
- DB2 User's Guide
- DFSORT manuals
- IMSL: International Mathematical and Statistical Libraries & DCRT/LSM Preface*
- INTERFACE*
- ISPF/PDF Basic Manual Set
- SPF/PDF Advanced Manual Set
- Kermit File Transfer Package; IBM Kermit PC diskette*
- MVS/XA JCL*
- MVS/XA Linkage Editor and Loader*
- MVS/XA System Messages and Codes*
- MVS/XA Utilities*
- Protocol Conversion Facility Manual
- PL/I manuals
- S/370 XA Principles of Operation and S/370 Reference Summary Card*
- Systems Services manual set
- Time Sharing Option (TSO) manuals
- VSAM manuals
- VS FORTRAN manuals
- WYLBUR manuals

Documentation for the IBM MVS/Extended Architecture (no automatic update):

- ABC (Independent Study Courses): *Introduction to WYLBUR, JCL, Computer Literacy, WYLBUR Set Command and Profiles, WYLBUR Multiple Active Files, Introduction to WYLBUR Document Formatting*
- ALP: Assembly Language Preprocessor User's Guide*
- CalComp Plotter manual
- DB2 Advanced Manual Set
- DB2 Applications Programming Set
- DB2 Basic Manual Set
- DB2 DXT Manual Set
- DB2 Introductory Set
- DISSPLA User's Manual and NIH Preface*
- Easy Reader User's Manual*
- Edit Format Utility Package*
- Electronic Spread Sheet (ESS) Manuals*
- Engineering and Scientific Subroutine Library Guide and Reference*
- Enter Formletter (Creating form letters using WYLBUR)*
- EZFORM/PTFORM User's Guide and NIH Preface (Microfiche)*

FOIL3800

IBM 3800 Printing Subsystem Print Line and Character Gauge

IBM 3480 Magnetic Tape Subsystem User's Reference

IBM 3480 Magnetic Tape Subsystem Reference: Channel Commands, Status and Sense Bytes, and Error Recovery Procedures

IBM 6670 Information Distributor General Information; Codes and Messages; 6670 Printing at NIH

IMS (Information Management System) manuals

Introducing the NIH Computer Utility

IRS (Inquiry and Reporting System) User's Guide

MVS/XA Magnetic Tape Labels and File Structure Administration

MVS/XA SPL: 31-Bit Addressing

NIH Computer Center Routines

NIH Computer Utility Yesterday and Today

PALTAPE

PASCAL/VS manuals

PPE: Problem Program Evaluator User's Guide

Project RMAG manuals

RACF (Resource Access Control Facility) General Information Manual

Remote Job Entry Workstation Guide System 370

TELL-A-GRAF User's Manual, NIH Preface, TAGLRN, Pocket Guide

Terminal Operator's Guide and PF Key Overlay

User manuals for BMDP, PSTAT, SAS BASICS, SAS/FSP, SAS/OR SAS STATISTICS, SAS/ETS,

SAS/GRAPH, SCSS, SPSS-X, SPSS-X Tables, SPSS Graphics

VMAP

VSAM Administration: Macro Instruction Reference

VTAM DSPRINT

VS Basic Language

WYLBUR Wisdom

WYLBUR Quick Introduction

XLR8: TSO CLIST Compiler

3800 M3 Printing Subsystem Compatibility Mode Font Selection Guide

Documentation for the DECsystem-10 facility (automatic update):

Computer Training Catalog and Schedule

DECsystem-10 BASIC Manual Reference Card

DECsystem-10 Omnigraph Display Manual

DECsystem-10 Timesharing Guide

DECsystem-10 Utilities Manual

IMSL (International Mathematical and Statistical Library) and DCRT/LSM Preface

INTERFACE

Kermit File Transfer Package; IBM Kermit PC diskette

MLAB manuals

PASCAL manuals

SAIL manuals

SOS Users Guide, SOS Commands Card

TOPS-10 Operating System Commands Manual

TOPS-10/20 FORTRAN Language Manual

TVEDIT -- Full Screen Editor for NIH Supported Video Terminals

Documentation for the DECsystem-10 facility (no automatic update):

APL and APLSF manuals

BLISS-10 Programmer's Reference Manual

BLISS-11 Programmer's Manual

BRIGHT, STAT-PACK

C Programming Language/Sargasso C Compiler User's Manual

CLINK Reference Manual

DECsystem-10 AID (Algebraic Interpretive Dialogue)

DECsystem-10 LINK-10 Programmer's Reference Manual

DECsystem-10 Macro-10 Assembler Programmer's Reference Manual
DECsystem-10 SORT/MERGE User's Guide
DECsystem-10/DECsystem-20 Processor Reference Manual
DECsystem-10/20 ALGOL Programmer's Guide
Getting Started on the DECsystem-10 at NIH
GRAPH
MAIL -- A User Collaboration Program
MIC -- Macro Interpreted Commands
POSTER
PUB manuals; PLUTO (Beginner's Guide to PUB)
REDUCE User's Manual
SCSS
SIMULA Language Handbook
SPSS-X
TECO Reference Manual, Introduction to TECO
Terminal Operator's Guide
TOPS-10 DDT Manual
TOPS-10 Monitor Calls Volume 1 & 2
TOPS-10/TOPS-20 Batch Reference Manual

Documents for the General Public

Public Information Office

Prepares and distributes general information about DCRT.

Ms. Patricia Miller
12A/3027
496-6203

Publications available to the general public include:

Computers at NIH: Tools for the Advancement of Medicine
Computer Systems Laboratory
Computing Resources of the Division of Computer Research and Technology
Data Management Branch
DCRT Annual Report
DCRT Library
Image Processing
Laboratory of Applied Studies
Laboratory of Statistical and Mathematical Methodology
New and Features from NIH: Computers in Biomedical Research
Perspectives for Biomedical Computing at NIH
Physical Sciences Laboratory
Visitor's Guide to the Division of Computer Research and Technology

Directory

Key to DCRT Unit Abbreviations:

CCB=Computer Center Branch
 CSL=Computer Systems Laboratory
 DMB=Data Management Branch
 LAS=Laboratory of Applied Studies
 LSM=Laboratory of Statistical & Mathematical Methodology
 OD=Office of the Director
 PSL=Physical Sciences Laboratory

Account numbers	OD	Project Control Office.....	496-6146
Administrative management, computer applications.	DMB	Mr. J. Emmett Ward.....	496-6256
Administrative Office	OD	Ms. Gloria I. Richardson.....	496-4647
ADP annual plan	OD	Mr. John Campbell.....	496-4885
ADP Policy	OD	Mr. John Campbell.....	496-4885
ADP Procurement	OD	Mr. Paul Burke.....	496-4602
ADP Systems Security	OD	Mr. John Campbell.....	496-4885
ALP	CCB	PAL Unit.....	496-5525
Applied Mathematics Section	LAS	Dr. John Fletcher	496-1121
Applied Systems Programming Section	DMB	Mr. Robert L. Martin.....	496-3401
Assembly (programming language)	CCB	PAL Unit.....	496-5525
Assistance (DECsystem-10)	CCB	Laboratory Systems Unit.....	496-4823
Assistance (IBM System 370)	CCB	PAL Unit.....	496-5525
AUTOTAB II	DMB	Mr. Ivan Soroka.....	496-3401
BASIC (programming language)	CCB	DECsystem-10	496-4823
Batch operations	CCB	PAL Unit.....	496-5525
Biomathematical & biostatistical computer programs.	LSM	Mr. Ray Danner.....	496-6037
Biomathematical modeling, interactive program for.	LSM	Mr. Marvin Shapiro.....	496-6037
Biomathematics & Computer Science Section	LSM	Dr. George Hutchinson.....	496-6037
Biomedical experiments, instrumentation for	PSL	Dr. Ralph Nossal.....	496-1135
Biophysics, consultation & collaboration	PSL	Dr. Ralph Nossal.....	496-1135
	PSL	Dr. Adrian Parsegian.....	496-1135
BITNET	CCB	PAL Unit.....	496-5525
	CCB	Laboratory Systems Unit.....	496-6823
BLOSSOM	DMB	Mr. Brian Cole	496-5693
BMDP	LSM	Mr. Ray Danner.....	496-6037
BRIGHT	DMB	Mr. Brian Cole	496-5693
Budget Office	OD	Mr. Michael Reed.....	496-6146
Bursting Services	CCB	Data Conversion Unit	496-6183
C	CCB	Laboratory Systems Unit.....	496-4823
CalComp plotter	CCB	Mrs. Ann Pole.....	496-5430
Central Systems Services Unit	CCB	Mr. Elgin Etchison.....	496-5815
Chemical physics	PSL	Dr. Adrian Parsegian.....	496-1135
CIU (Clinical Information Utility) System	DMB	Mr. William Vincent.....	496-4727
C-LAB	LSM	Mr. Marvin Shapiro.....	496-6037
Clinical collaborations, computer modeling studies.	LAS	Dr. John Fletcher	496-1121
Clinical data, managing, archiving, retrieving	DMB	Mr. William Vincent.....	496-4727
Clinical Support Section	DMB	Mr. William Vincent.....	496-4727
CLINK (Communications Link)	CSL	Mr. Keith Gorlen.....	496-5361

COBOL.....	CCB	PAL Unit.....	496-5525
Computer Center Branch, Chief.....	CCB	Mr. Joseph Naughton.....	496-5381
Computer Systems Laboratory, Chief.....	CSL	Mr. Alan Demmerle.....	496-1111
Computer systems, specialized.....	CSL	Mr. Perry Plexico.....	496-1111
Courses offered at DCRT: advice.....	CCB	Training Unit.....	496-2339
Courses offered at DCRT: catalogs, registration ...	CCB	Technical Information Office.....	496-5431
CP Tools.....	DMB	Mr. Robert Magnuson.....	496-6256
Crystallography.....	PSL	Dr. Byungkok Lee.....	496-1135
CSA (Conversational Statistical System).....	DMB	Mr. George Roberts.....	496-5694
Curve fitting.....	LAS	Mr. Richard Shrager.....	496-1122
Data Acquisition Systems.....	CSL	Mr. Arthur Schultz.....	496-5361
Data Analysis (fitting).....	LAS	Mr. Richard Shrager.....	496-1122
Data Base Applications Section.....	DMB	Mr. Marvin Katz.....	496-1138
Data base management.....	DMB	Mr. J. Emmett Ward.....	496-6256
Data Base Systems Unit (IBM).....	CCB	Mr. Jack Halverson.....	496-6665
Data Base 2 (DB2).....	CCB	PAL Unit.....	496-5525
dBASE III Plus.....	OD	PWO.....	496-2282
Data Management Branch, Chief.....	DMB	Mr. J. Emmett Ward.....	496-6256
DECsystem-10, manuals.....	CCB	Technical Info. Office.....	496-5431
DECsystem-10 Operations Unit.....	CCB	Mr. James Jacobs.....	496-6755
DECsystem-10, user assistance.....	CCB	Laboratory Systems Unit.....	496-4823
Dedicated Equipment Services (terminals & diskpacks).	CCB	Mr. Carl Cramer.....	496-2248
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Differential equations.....	PSL	Dr. George Weiss.....	496-1135
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Director, DCRT, Deputy.....	OD	Dr. William C. Mohler.....	496-1168
Disk space, private online.....	CCB	Mr. Carl Cramer.....	496-2248
DisplayWrite 3/4.....	OD	PWO.....	496-2282
DISSPLA.....	CCB	PAL Unit.....	496-5525
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DW2-Em-U-Print.....	OD	PWO.....	496-2282
ECG analysis.....	LAS	Dr. James Bailey.....	496-2847
EEG and Evoked Potential Analysis.....	LAS	Dr. Richard Burgess.....	496-6561
EEO Officer.....	OD	Ms. Erma Johnson.....	496-2172
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Electronic Spread Sheet (ESS).....	CCB	PAL Unit.....	496-5525
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HALO Graphics	LAS	Ms. M.A. Douglas.....	496-2847
IBM manuals	CCB	Technical Info. Office	496-5431
IBM self-study courses	CCB	Training Unit	496-2339
IBM System 370, system services	CCB	Mr. Elgin Etchison.....	496-5815
IBM System 370, user assistance	CCB	PAL Unit.....	496-5525
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IMS.....	CCB	Mr. Jack Halverson.....	496-6665
IMSL	LSM	Mr. Ray Danner	496-6037
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INTERFACE (technical notes).....	CCB	Technical Info. Office	496-5431
IRS	DMB	Mr. Dick Baxter.....	496-1686
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KERMIT	CCB	Laboratory Systems Unit.....	496-4823
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Laser light scattering techniques	PSL	Dr. Ralph Nossal.....	496-1135
Letters to Data Line.....	CCB	Editor, Interface.....	496-5431
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Logic subroutines, RMAG	DMB	Mr. Robert Magnuson.....	496-6256
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Macromolecular forces, theory of.....	PSL	Dr. Adrian Parsegian.....	496-1135
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Mathematics, applied	LAS	Dr. John Fletcher	496-1121
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Mathematics, finite.....	LSM	Dr. George Hutchinson.....	496-6037
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Personal Computers, laboratory applications.....	CSL	Mr. James Sullivan.....	496-1113
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Regional analysis of Biological Images	LAS	Ms. M. A. Douglas.....	496-2847
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RMAG (Recursive Macro-Actuated Generator).....	DMB	Mr. Robert Magnuson.....	496-6256

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SCSS	LSM	Ms. Rita Minker.....	496-6037
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ZETA plotter (user's area)	CCB	Dedicated Equipment Services	496-2248

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